

What is claimed is:

[Handwritten signature] 1. A method for diagnosing the presence of colon cancer in a patient comprising:

(a) determining levels of CSG in cells, tissues or
5 bodily fluids in a patient; and

(b) comparing the determined levels of CSG with levels of CSG in cells, tissues or bodily fluids from a normal human control, wherein a change in determined levels of CSG in said patient versus normal human control is associated with the
10 presence of colon cancer.

2. A method of diagnosing metastases of colon cancer in a patient comprising:

(a) identifying a patient having colon cancer that is
15 not known to have metastasized;

(b) determining CSG levels in a sample of cells, tissues, or bodily fluid from said patient; and

(c) comparing the determined CSG levels with levels of CSG in cells, tissue, or bodily fluid of a normal human
20 control, wherein an increase in determined CSG levels in the patient versus the normal human control is associated with a cancer which has metastasized.

3. A method of staging colon cancer in a patient
25 having colon cancer comprising:

(a) identifying a patient having colon cancer;

(b) determining CSG levels in a sample of cells, tissue, or bodily fluid from said patient; and

(c) comparing determined CSG levels with levels of CSG
30 in cells, tissues, or bodily fluid of a normal human control, wherein an increase in determined CSG levels in said patient versus the normal human control is associated with a cancer which is progressing and a decrease in the determined CSG levels is associated with a cancer which is regressing or in
35 remission.

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4. A method of monitoring colon cancer in a patient for the onset of metastasis comprising:

(a) identifying a patient having colon cancer that is not known to have metastasized;

5 (b) periodically determining levels of CSG in samples of cells, tissues, or bodily fluid from said patient; and

(c) comparing the periodically determined CSG levels with levels of CSG in cells, tissues, or bodily fluid of a normal human control, wherein an increase in any one of the
10 periodically determined CSG levels in the patient versus the normal human control is associated with a cancer which has metastasized.

5. A method of monitoring a change in stage of colon
15 cancer in a patient comprising:

(a) identifying a patient having colon cancer;

(b) periodically determining levels of CSG in cells, tissues, or bodily fluid from said patient; and

(c) comparing the periodically determined CSG levels
20 with levels of CSG in cells, tissues, or bodily fluid of a normal human control, wherein an increase in any one of the periodically determined CSG levels in the patient versus the normal human control is associated with a cancer which is progressing in stage and a decrease is associated with a
25 cancer which is regressing in stage or in remission.

~~6. A method of identifying potential therapeutic agents for use in imaging and treating colon cancer comprising screening molecules for an ability to bind to CSG or decrease
30 expression of CSG relative to CSG in the absence of the agent wherein the ability of a molecule to bind to CSG or decrease expression of CSG is indicative of the molecule being useful in imaging and treating colon cancer.~~

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7. The method of claim 1, 2, 3, 4, 5 or 6 wherein the CSG comprises SEQ ID NO:1 or a polypeptide encoded thereby.

8. An antibody which specifically binds a polypeptide 5 encoded by SEQ ID NO: 1.

9. A method of imaging colon cancer in a patient comprising administering to the patient an antibody of claim 8.

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10. The method of claim 9 wherein said antibody is labeled with paramagnetic ions or a radioisotope.

11. A method of treating colon cancer in a patient 15 comprising administering to the patient a molecule which downregulates expression or activity of CSG.

12. A method of inducing an immune response against a target cell expressing CSG comprising delivering to a human 20 patient an immunogenically stimulatory amount of a CSG protein so that an immune response is mounted against the target cell.

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